

...OCTOBER 2010 REGIONAL CLIMATE SUMMARY...

SUMMARY FOR THE SAN FRANCISCO BAY AREA AND MONTEREY BAY AREA...

THE FIRST HALF OF OCTOBER 2010 WAS MOSTLY DRY AND INCLUDED A RECORD HEAT EVENT FROM THE 11TH THROUGH THE 13TH. THE LATTER HALF OF THE MONTH WAS WET AND COOL. OVERALL...THE MONTH WAS GENERALLY WETTER THAN NORMAL...ESPECIALLY IN THE NORTH BAY...AND ALSO COOLER THAN NORMAL.

A WEAK UPPER LEVEL TROUGH MOVED INTO NORTHERN CALIFORNIA ON THE 4TH...BRINGING COOL CONDITIONS TO THE REGION...BUT ALMOST NO PRECIPITATION. THE TROUGH THEN DEVELOPED INTO A CUTOFF LOW WHICH MEANDERED ABOUT OVER CENTRAL AND SOUTHERN CALIFORNIA FROM THE 5TH THROUGH THE 7TH...SPAWNING SCATTERED LIGHT SHOWERS ACROSS PORTIONS OF MONTEREY AND SAN BENITO COUNTIES. ONCE THE LOW MOVED OFF TO THE EAST...AN UPPER RIDGE GRADUALLY INTENSIFIED OVER THE STATE FROM THE 8TH THROUGH THE 12TH. BY THE 11TH...TEMPERATURES HAD WARMED INTO THE 80S NEAR THE COAST AND INTO THE 90S INLAND...AND THEN REMAINED THAT WARM FOR THE NEXT TWO DAYS. SEVERAL DAILY HIGH TEMPERATURE RECORDS WERE MATCHED OR EXCEEDED FROM THE 11TH THROUGH THE 13TH. TEMPERATURES DROPPED RAPIDLY ON THE 15TH AND 16TH AS THE RIDGE MOVED TO THE EAST AND A WEAK WEATHER SYSTEM APPROACHED FROM THE WEST. THAT WEATHER SYSTEM PRODUCED LIGHT AMOUNTS OF RAIN ACROSS MOST OF THE AREA ON THE 17TH. MUCH HEAVIER AMOUNTS OF RAIN FELL ON NORTHERN CALIFORNIA ABOUT A WEEK LATER AS A WEATHER SYSTEM WITH LARGE AMOUNTS OF MOISTURE ARRIVED ALONG THE WEST COAST...MOISTURE THAT ORIGINATED WITH TYPHOON MEJI OVER THE WESTERN PACIFIC. TROPICAL MOISTURE WAS TRANSPORTED ACROSS THE OCEAN BY A STRONG ZONAL JET STREAM. RAINFALL WITH THIS SYSTEM BEGAN ON FRIDAY THE 22ND...AND INTENSIFIED OVER THE WEEKEND OF THE 23RD AND 24TH. MOST OF THE HEAVY RAIN WAS FOCUSED ON THE NORTH BAY...WITH AMOUNTS DROPPING OFF SIGNIFICANTLY SOUTH OF THE GOLDEN GATE. HOWEVER...A FEW LOCATIONS SOUTH OF SAN FRANCISCO PICKED UP SIGNIFICANT RAIN FROM THIS SYSTEM...MAINLY IN OROGRAPHICALLY-FAVORED AREAS SUCH AS THE SOUTHWEST SLOPES OF THE SANTA CRUZ MOUNTAINS. HEAVIEST RAIN FELL ON SUNDAY THE 24TH AND TOTALS FOR THAT DAY INCLUDED:

LOCATION	COUNTY	RAIN TOTAL
OCCIDENTAL	SONOMA	6.53
KENTFIELD	MARIN	4.26
GUERNEVILLE	SONOMA	3.75
SANTA ROSA	SONOMA	3.22
BEN LOMOND	SANTA CRUZ	2.49
NAPA	NAPA	2.35
SANTA CRUZ	SANTA CRUZ	1.94
PACIFICA	SAN MATEO	1.19
OAKLAND	ALAMEDA	0.73
SAN FRANCISCO	SAN FRANCISCO	0.60
MONTEREY	MONTEREY	0.56
LIVERMORE	ALAMEDA	0.45
KING CITY	MONTEREY	0.13
LOS GATOS	SANTA CLARA	0.08

THIS LIST ILLUSTRATES THE LARGE RAINFALL GRADIENT FROM NORTH TO SOUTH ACROSS THE REGION. IN ADDITION...OROGRAPHIC ENHANCEMENT OF RAINFALL IS CLEARLY EVIDENT WHEN COMPARING RAIN AMOUNTS FROM SOUTHWEST TO NORTHEAST ACROSS SANTA CRUZ AND SANTA CLARA COUNTIES. FOR EXAMPLE...2.49 INCHES OF RAIN FELL IN BEN LOMOND ON THE WINDWARD SIDE OF THE SANTA CRUZ MOUNTAINS...BUT ONLY 0.08 INCHES ACCUMULATED IN LOS GATOS ON THE LEE SIDE OF THE MOUNTAINS.

STORM TOTAL RAINFALL (22ND-24TH) AT OCCIDENTAL WAS AN IMPRESSIVE 10.65 INCHES...PUSHING THE TOTAL FOR THE MONTH TO 12.11 INCHES WHICH IS 367 PERCENT OF THE NORMAL 3.30 INCHES OF OCTOBER RAINFALL IN THIS WESTERN SONOMA COUNTY LOCATION. ELSEWHERE IN THE NORTH BAY...RAIN TOTALS FOR THE MONTH WERE GENERALLY 200 TO 250 PERCENT OF NORMAL. SOUTH OF THE GOLDEN GATE...MONTHLY RAINFALL TOTALS WERE SUBSTANTIALLY LOWER. EVEN SO...A MAJORITY OF REPORTING LOCATIONS HAD MONTHLY RAINFALL TOTALS THAT WERE ABOVE THE OCTOBER 30-YEAR AVERAGE. THOSE LOCATIONS WHICH SAW BELOW NORMAL RAIN FOR THE MONTH WERE PRIMARILY ON THE LEE SIDE OF COASTAL MOUNTAIN RANGES.

ONE MORE RAIN EVENT OCCURRED LATE IN THE MONTH. AN UPPER LOW DEVELOPED OFFSHORE ON THE 27TH AND DROPPED SLOWLY TO THE SOUTH THROUGH THE 30TH. RAIN WAS POISED TO SPREAD INTO SAN FRANCISCO FOR GAME TWO OF THE WORLD SERIES BETWEEN THE SAN FRANCISCO GIANTS AND TEXAS RANGERS ON THURSDAY OCTOBER 28. BUT THE LOW REMAINED JUST FAR ENOUGH OFFSHORE TO KEEP RAIN CONFINED TO AREAS TO THE NORTH AND WEST OF SAN FRANCISCO. IN FACT...MOST OF THE AREA REMAINED IN THE WARM AND DRY SECTOR AHEAD OF THE FRONTAL BOUNDARY UNTIL FRIDAY AND SATURDAY THE 29TH AND 30TH.

IN BETWEEN THE WET STORM ON THE 24TH AND THE DELAYED SYSTEM AT THE END OF THE MONTH...THERE WAS A PERIOD OF CLEAR AND COOL WEATHER. THE FIRST FROST ADVISORY OF THE SEASON WAS ISSUED FOR THE EARLY MORNING HOURS OF WEDNESDAY THE 27TH. PATCHY FROST DEVELOPED EARLY THAT MORNING...MAINLY IN THE NORTH BAY VALLEYS AND IN THE VALLEYS OF MONTEREY AND SAN BENITO COUNTIES.

WET CONDITIONS AND ASSOCIATED CLOUD COVER DURING THE SECOND HALF OF THE MONTH RESULTED IN BELOW NORMAL AVERAGE HIGH TEMPERATURES FOR OCTOBER AT NEARLY ALL REPORTING LOCATIONS...EVEN WITH THE RECORD HEAT FROM THE 11TH THROUGH THE 13TH. DEPARTURES FROM NORMAL WERE LARGEST ACROSS THE NORTH BAY WHERE AVERAGE HIGHS WERE 3 TO 5 DEGREES BELOW NORMAL. LOW TEMPERATURES IN THE NORTH BAY WERE GENERALLY A BIT ABOVE NORMAL...THANKS TO THE INSULTING EFFECTS OF CONSIDERABLE CLOUD COVER DURING THE SECOND HALF OF THE MONTH. ELSEWHERE...LOW TEMPERATURES WERE A MIXED BAG WITH SOME LOCATIONS ABOVE NORMAL AND OTHERS BELOW.

...OCTOBER REGIONAL TEMPERATURE SUMMARY...

	DEPARTURE			DEPARTURE		
	AVG	NORMAL	FROM	AVG	NORMAL	FROM
LOCATION	HIGH	HIGH	NORMAL	LOW	LOW	NORMAL

NORTH BAY...

ANGWIN	68.2	72.4	-4.2	50.1	49.3	0.8
HEALDSBURG	72.7	77.7	-5.0	49.6	48.8	0.8
KENTFIELD	70.4	75.4	-5.0	51.2	48.9	2.3
NAPA	73.5	77.0	-3.5	51.3	49.0	2.3
SAN RAFAEL	70.1	74.7	-4.6	52.0	50.9	1.1
SANTA ROSA	73.7	76.8	-3.1	49.2	48.2	1.0

SAN FRANCISCO PENINSULA...

HALF MOON BAY	64.4	65.5	-1.1	48.1	48.7	-0.6
REDWOOD CITY	73.0	74.9	-1.9	51.6	49.3	2.3
SAN FRANCISCO AIRPORT	M	70.4	M	M	52.4	M
SAN FRANCISCO DOWNTOWN	67.0	70.1	-3.1	54.2	54.6	-0.4

EAST BAY...

BERKELEY	71.2	69.7	1.5	51.4	53.2	-1.8
CONCORD	M	77.5	M	M	52.9	M
FREMONT	72.6	73.5	-0.9	53.2	51.5	1.7
LIVERMORE	75.5	78.2	-2.7	51.2	48.3	2.9
MARTINEZ	73.9	76.8	-2.9	47.8	49.5	-1.7
MOUNT DIABLO JUNCTION	70.1	74.1	-4.0	52.8	51.5	1.3
NEWARK	71.6	72.8	-1.2	54.0	53.7	0.3
OAKLAND	70.7	72.1	-1.4	54.5	55.4	-0.9

SOUTH BAY AND SANTA CRUZ COUNTY...

BEN LOMOND	75.2	77.9	-2.7	46.4	44.6	1.8
LOS GATOS	73.5	75.6	-2.1	51.2	48.4	2.8
MOUNT HAMILTON	63.8	65.4	-1.6	50.3	50.8	-0.5
SAN JOSE	74.4	74.7	-0.3	54.6	52.4	2.2
SANTA CRUZ	69.8	72.3	-2.5	50.3	48.2	2.1

MONTEREY AND SAN BENITO COUNTIES...

CARMEL VALLEY	74.2	76.7	-2.5	48.5	46.6	1.9
HOLLISTER	77.9	77.5	0.4	49.8	47.6	2.2
KING CITY	77.3	79.6	-2.3	49.2	45.5	3.7
MONTEREY	66.3	70.2	-3.9	50.5	51.1	-0.6
SALINAS	M	73.3	M	M	49.7	M

...OCTOBER REGIONAL PRECIPITATION SUMMARY...

LOCATION	OCT TOTAL	AVERAGE OCT PRECIP	PERCENT OF NORMAL
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NORTH BAY...

ANGWIN	5.26	2.09	252
CALISTOGA	4.95	2.00	248
CLOVERDALE	5.64	2.25	251
FORT ROSS	5.86	2.28	257
HEALDSBURG	5.08	2.12	240
KENTFIELD	5.90	2.33	253
MUIR WOODS	5.66	2.07	273
NAPA	3.71	1.43	259
OCCIDENTAL	12.11	3.30	367
PETALUMA	M	1.42	M
SAINT HELENA	3.55	1.81	196
SAN RAFAEL	2.98	1.55	192
SANTA ROSA	5.14	1.81	284
SONOMA	3.94	1.61	245

SAN FRANCISCO PENINSULA...

HALF MOON BAY	1.10	1.82	60
REDWOOD CITY	0.54	1.06	51
SAN FRANCISCO AIRPORT	0.84	1.04	81
SAN FRANCISCO DOWNTOWN	1.81	1.16	156

EAST BAY...

BERKELEY	1.63	1.39	117
CONCORD	M	0.65	M
FREMONT	0.39	0.70	56
LIVERMORE	1.00	0.82	122
MARTINEZ	1.01	0.94	107
MOUNT DIABLO JUNCTION	1.73	1.36	127
NEWARK	0.36	0.90	40
OAKLAND	1.42	1.38	103
RICHMOND	M	1.40	M

SOUTH BAY AND SANTA CRUZ COUNTY...

BEN LOMOND	3.60	2.29	157
GILROY	1.07	0.93	115
LOS GATOS	0.38	1.02	37
MOUNT HAMILTON	2.51	1.51	166
SAN JOSE	M	0.88	M
SANTA CRUZ	3.16	1.44	219
WATSONVILLE	M	1.06	M

MONTEREY AND SAN BENITO COUNTIES...

BIG SUR STATION	M	2.01	M
CARMEL VALLEY	0.77	0.70	110
HOLLISTER	0.80	0.63	127
KING CITY	0.69	0.57	121

MONTEREY	1.03	1.05	98
PINNACLES NATIONAL			
MONUMENT	1.18	0.93	127
SALINAS	M	0.75	M

...DAILY TEMPERATURE RECORDS FOR OCTOBER 2010...

DATE	LOCATION	RECORD MAXIMUM TEMP	OLD RECORD
10/11	SAN FRANCISCO AIRPORT	88	87 IN 1978
10/11	SANTA ROSA	97	96 IN 1991
10/11	MOFFETT FIELD	87	87 IN 1991
10/11	NAPA	89	89 IN 2004
10/11	SAN RAFAEL	90	90 IN 1959
10/12	SAN FRANCISCO AIRPORT	94	90 IN 1971
10/12	OAKLAND AIRPORT	91	87 IN 1955
10/12	SAN JOSE	93	93 IN 1901
10/13	SAN FRANCISCO AIRPORT	92	91 IN 1978
10/13	OAKLAND AIRPORT	92	89 IN 1961
10/13	RICHMOND	92	91 IN 1978
10/13	SAN JOSE	93	93 IN 1901

...MONTHLY RANKS FOR DOWNTOWN SAN FRANCISCO...

AVERAGE HIGH TEMPERATURE.....67.0.....41ST COOLEST OUT OF 136 YEARS
 AVERAGE LOW TEMPERATURE.....54.2.....61ST WARMEST OUT OF 136 YEARS
 PRECIPITATION.....1.81 INCHES....31ST WETTEST OUT OF 161 YEARS

NOTE: THIS CLIMATOLOGICAL DATA IS PRELIMINARY. FOR OFFICIAL
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